

# ***Annual Energy Outlook 2007***

**Energy Information Administration**

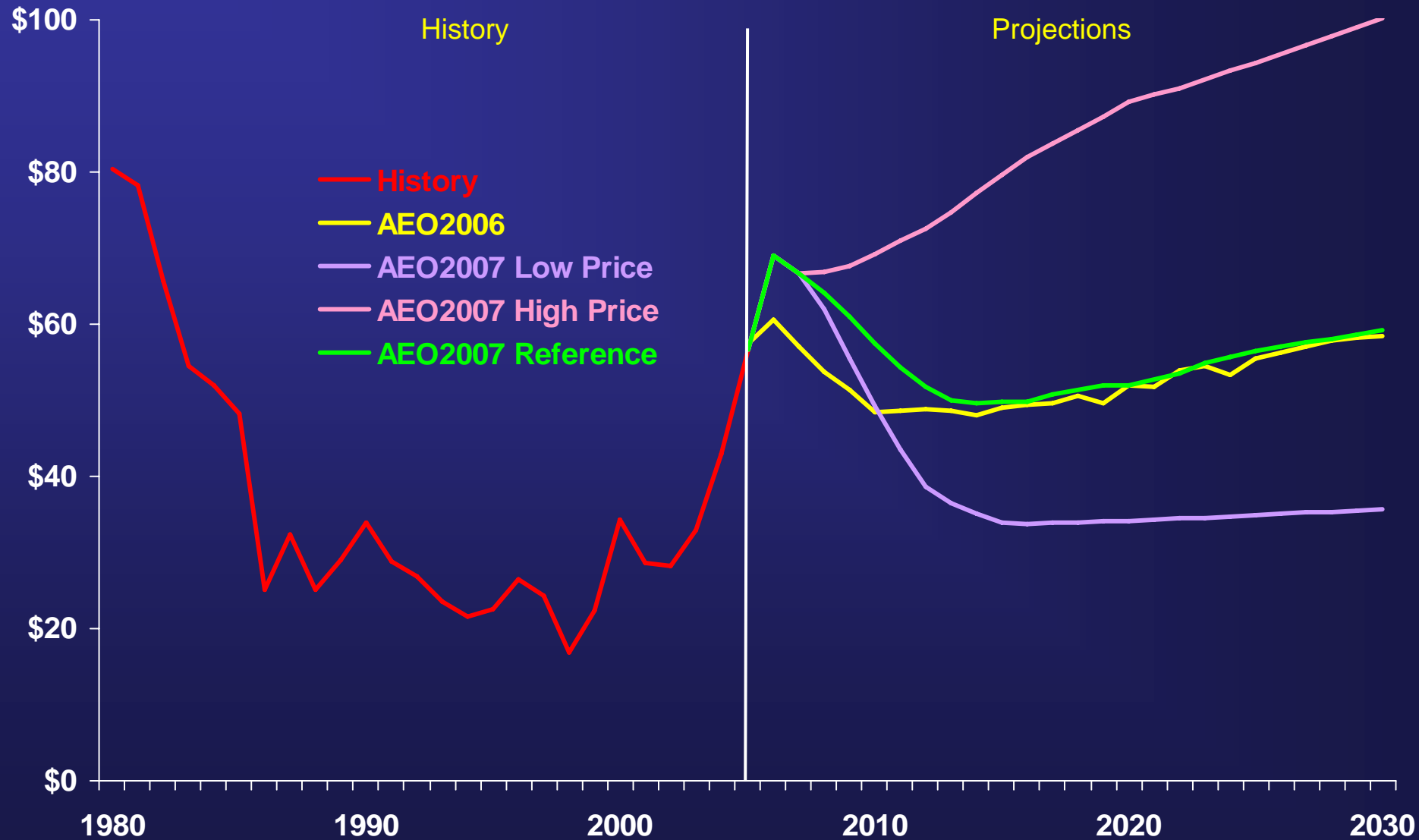
**December 5, 2006**

**[www.eia.doe.gov](http://www.eia.doe.gov)**

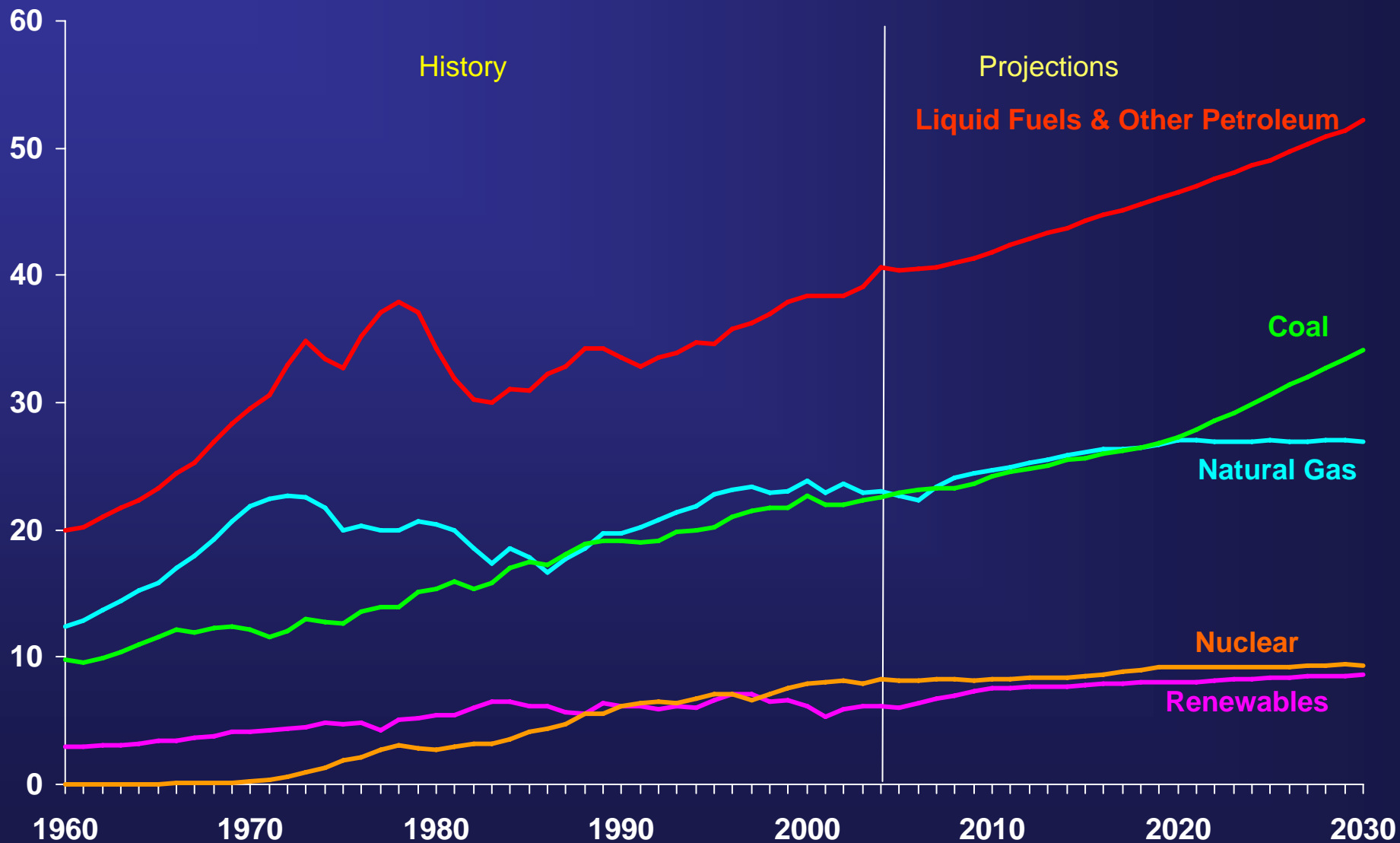
## Energy issues to consider....

- How are energy trends changing?
- What role will ethanol play in the future?
- How big a contribution can alternative sources of distillate fuel oil, such as coal-to-liquids and biodiesel, make to energy supply?
- What is the role for unconventional vehicle technologies?
- How large of a contribution will LNG make to meeting energy requirements?
- Will coal continue to play a dominant role in U.S. electricity generation?
- What role will nuclear generation play in meeting electricity requirements?

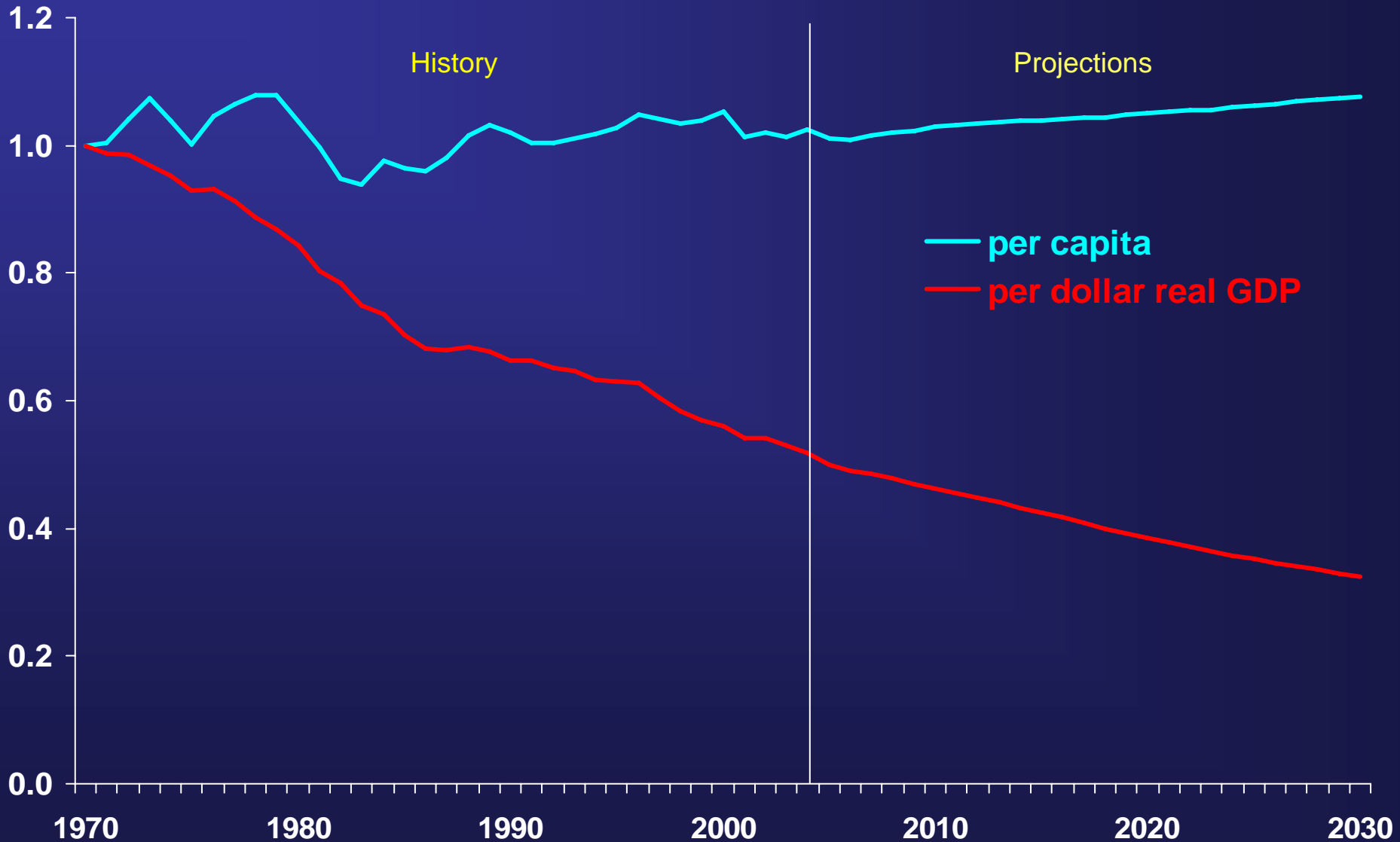
# World Oil Price, 1980-2030 (2005 dollars per barrel)



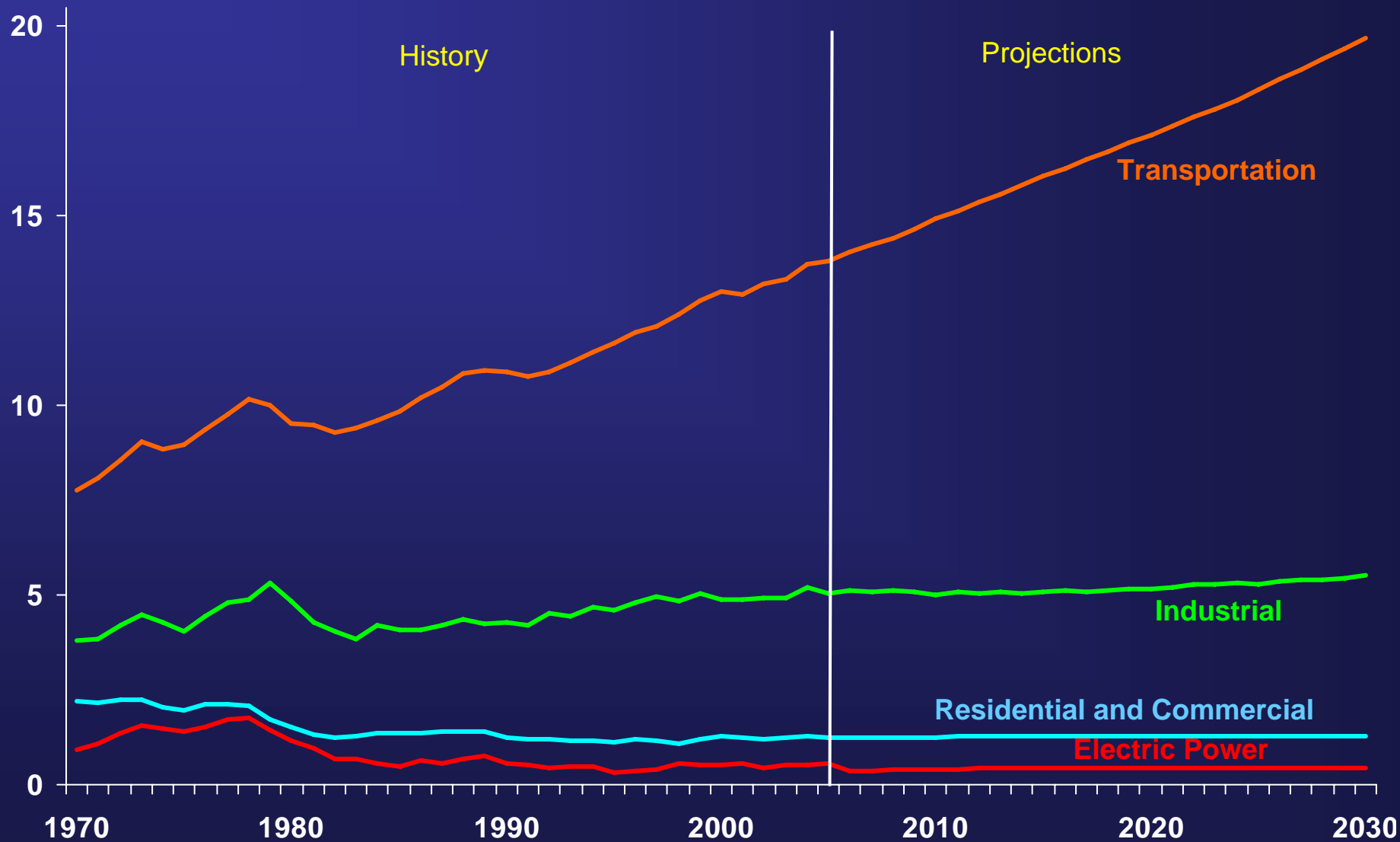
# U.S. Primary Energy Consumption by Fuel, 1960-2030 (quadrillion Btu)



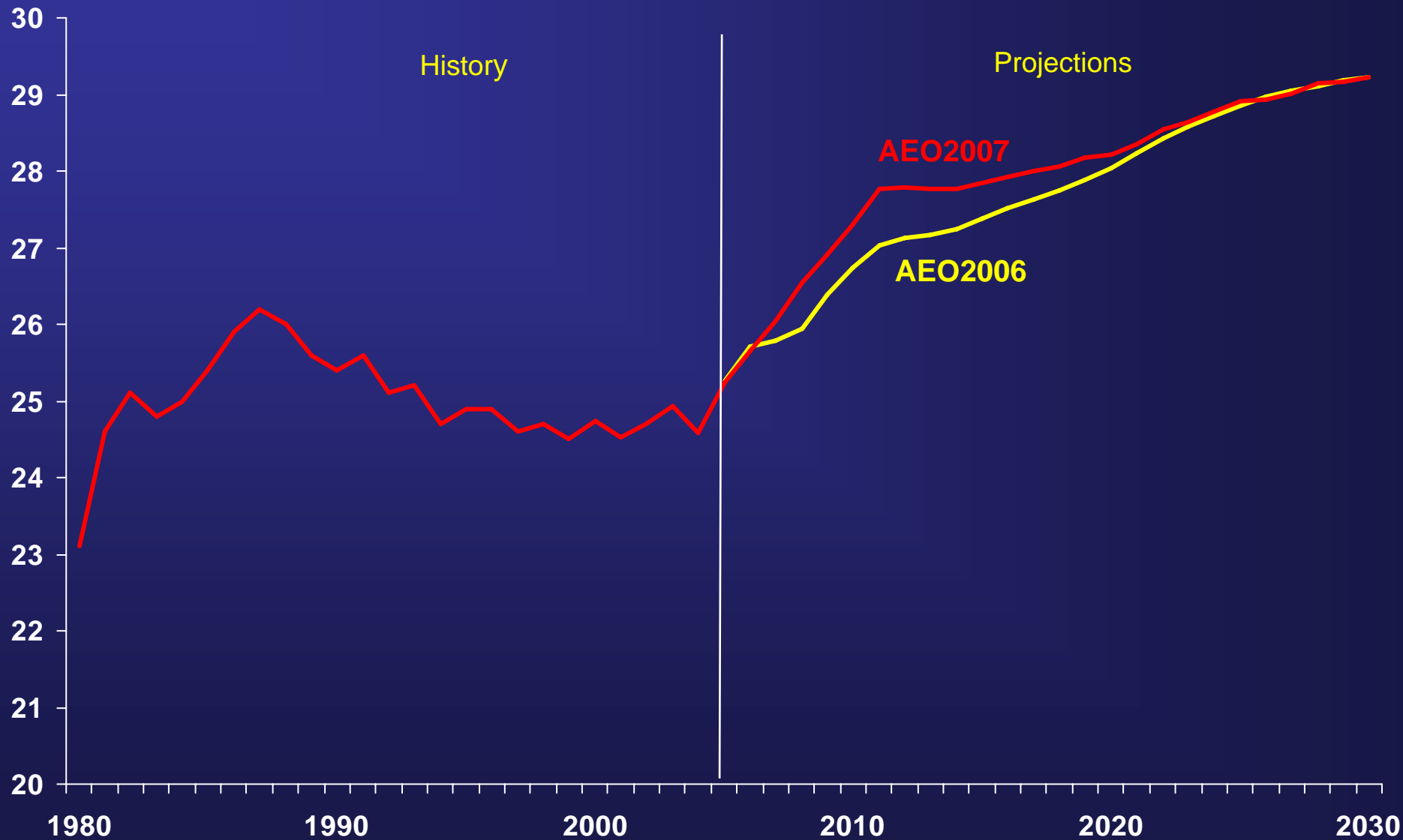
# U.S. Energy Use per Capita and per Dollar of Real Gross Domestic Product, 1970-2030 (index, 1970 = 1)



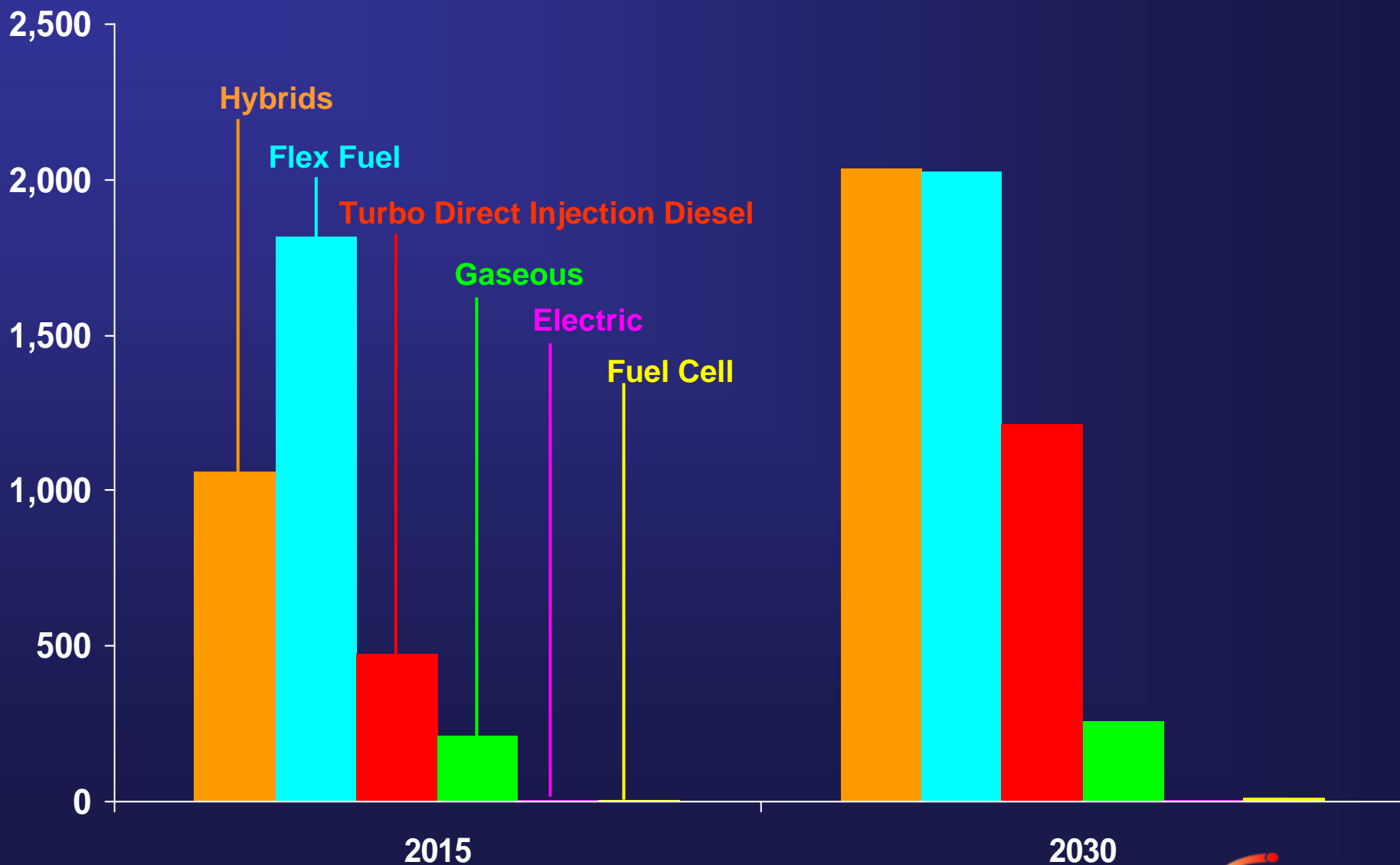
# Consumption of Liquids and Other Petroleum Products by Sector, 1970-2030 (million barrels per day)



# U.S. New Light-Duty Vehicle Efficiency, 1980-2030 (gasoline-equivalent miles per gallon)

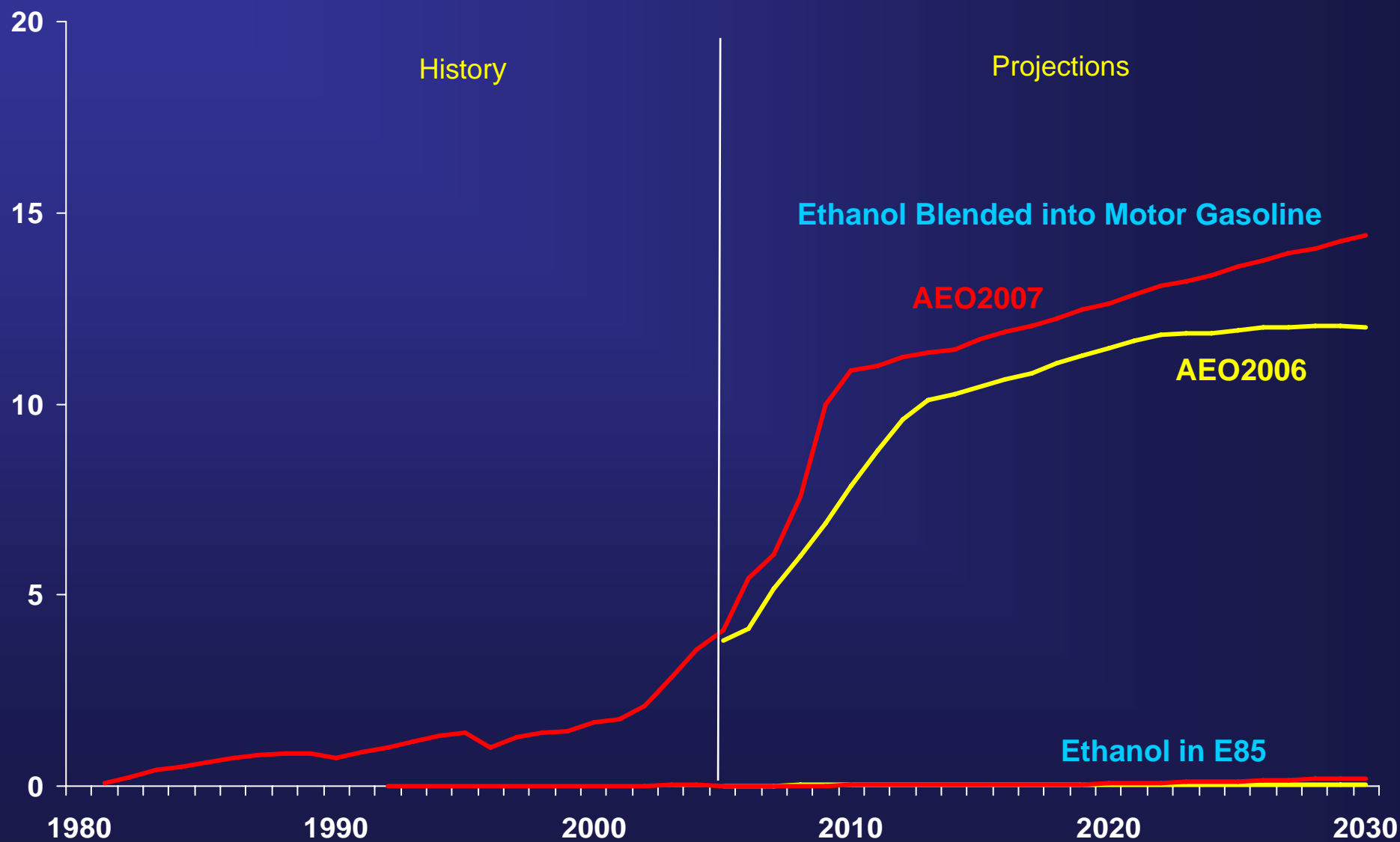


# U.S. Sales of Unconventional Light-Duty Vehicles, 2015 and 2030 (thousand vehicles sold)

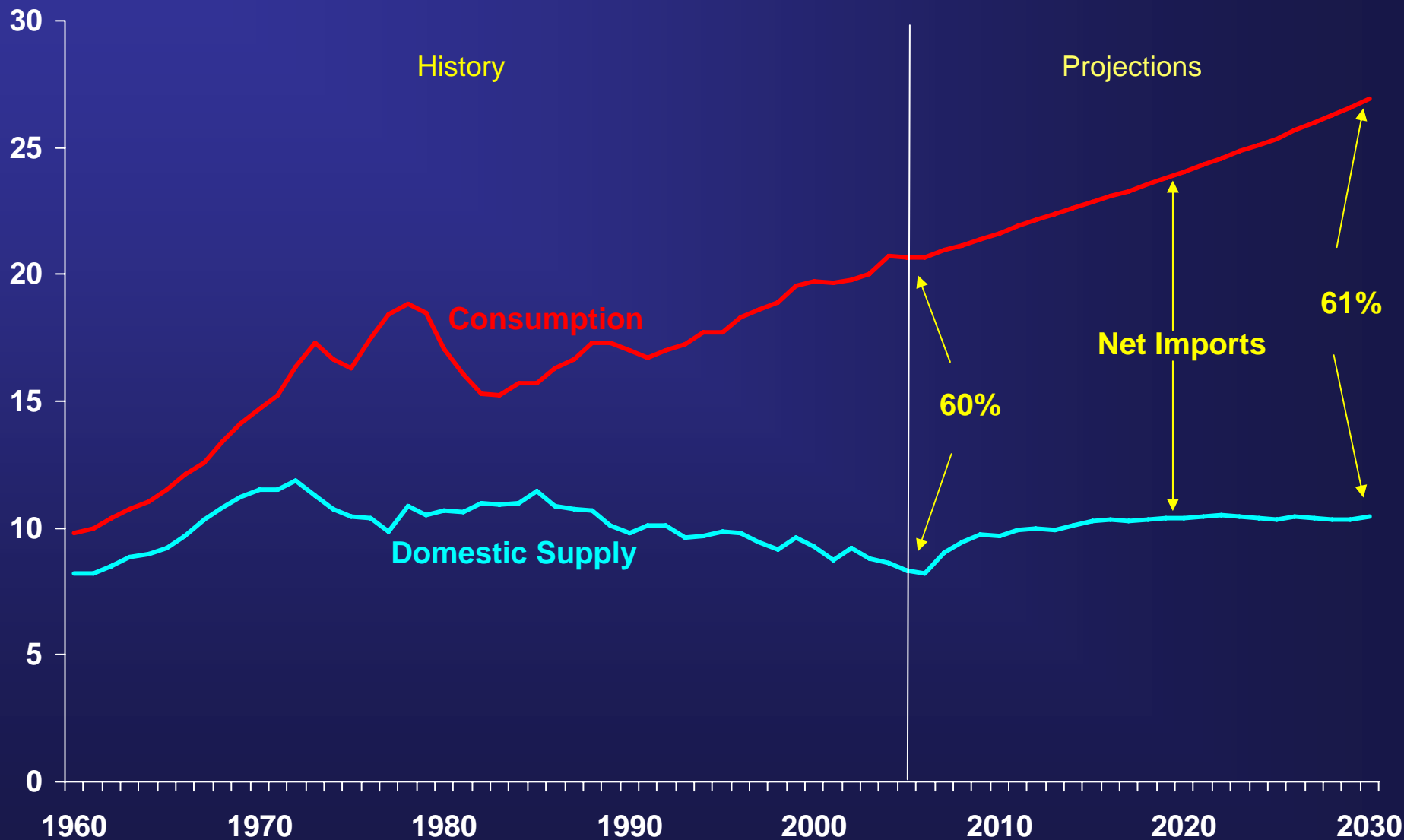




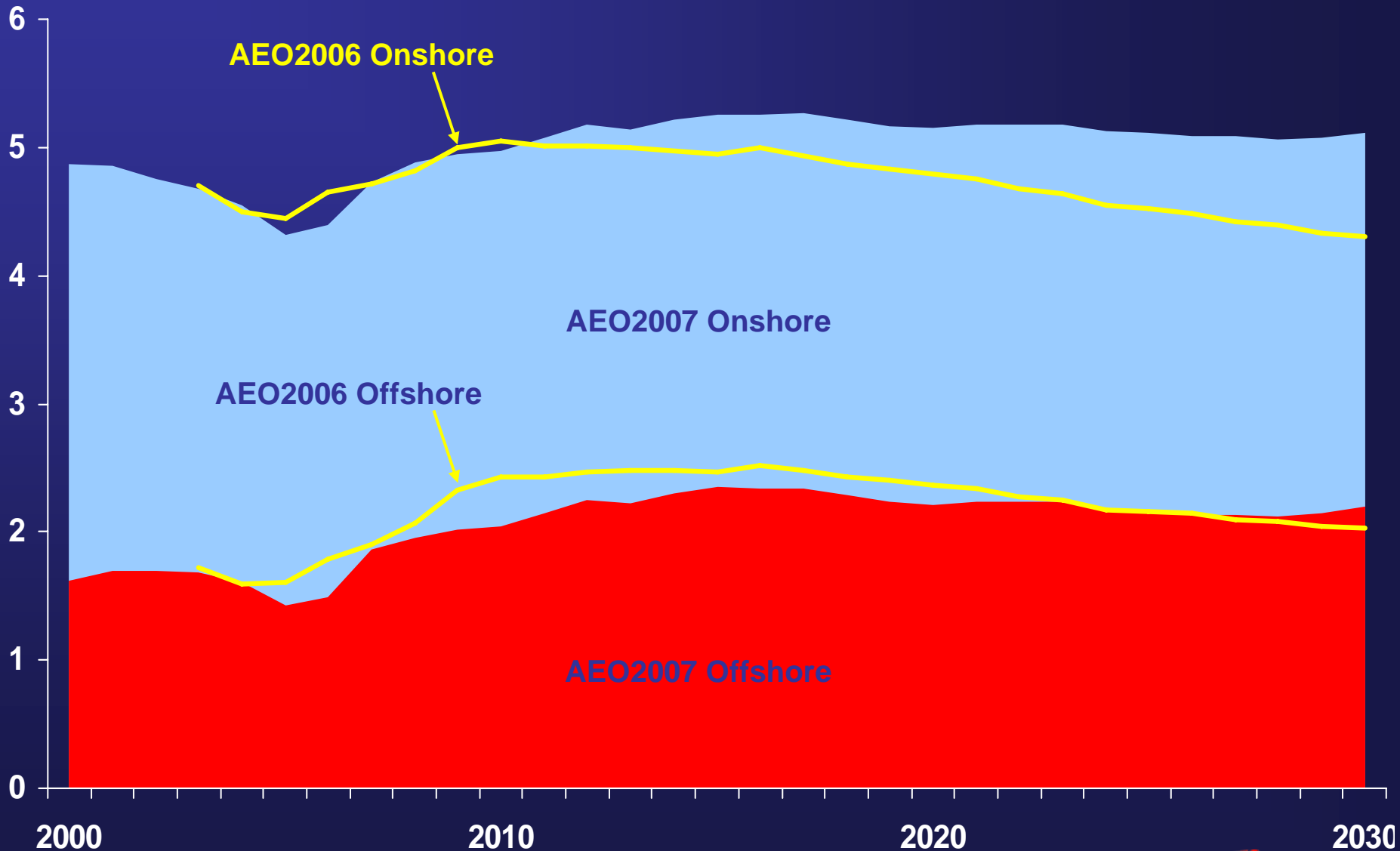
# Ethanol Consumption as E85 and Blended with Motor Gasoline, 1981-2030 (billion gallons)



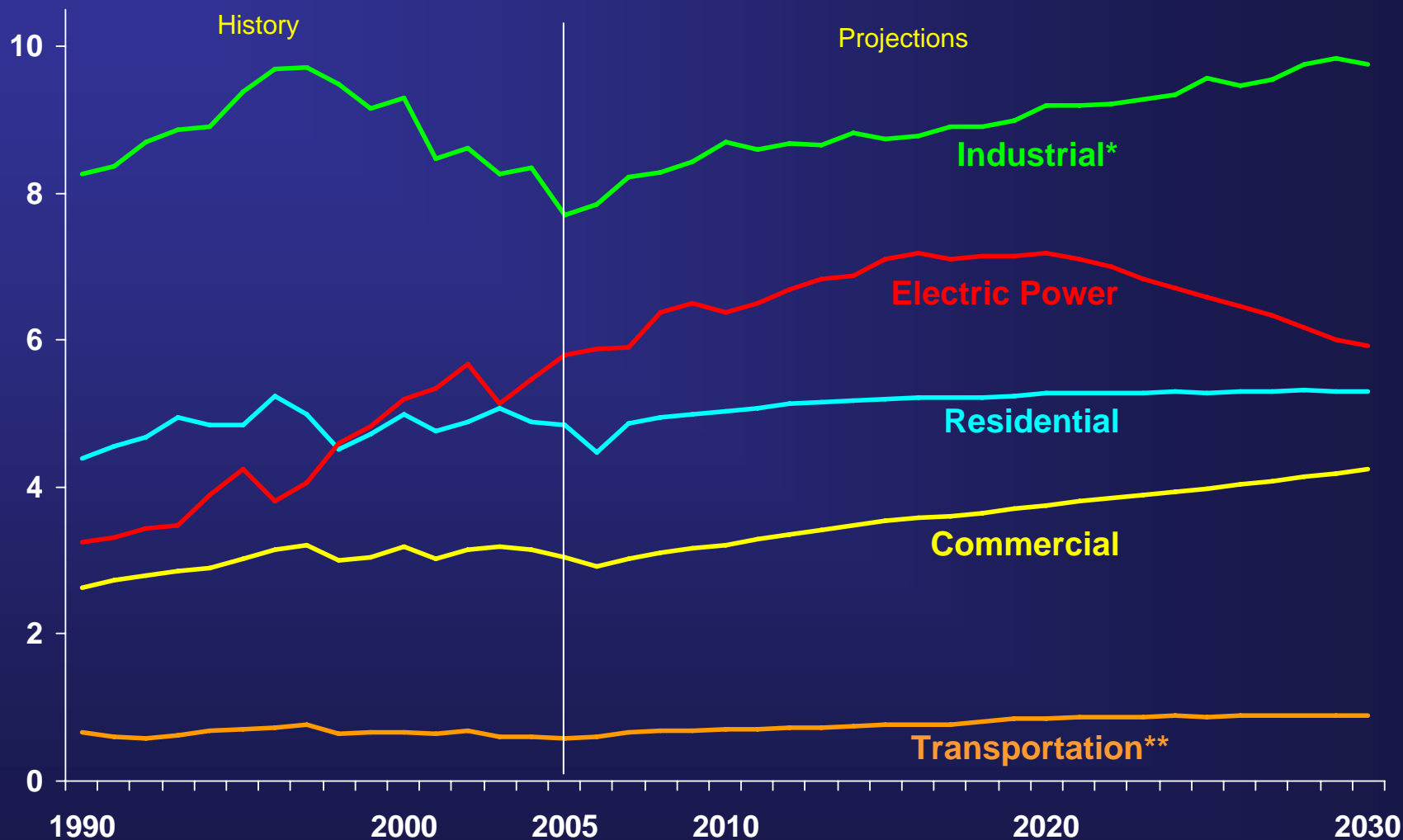
# U.S. Petroleum/Liquids Supply, Consumption, and Net Imports, 1960-2030 (million barrels per day)



# Lower-48 Crude Oil Production by Source, 2000-2030 (million barrels per day)



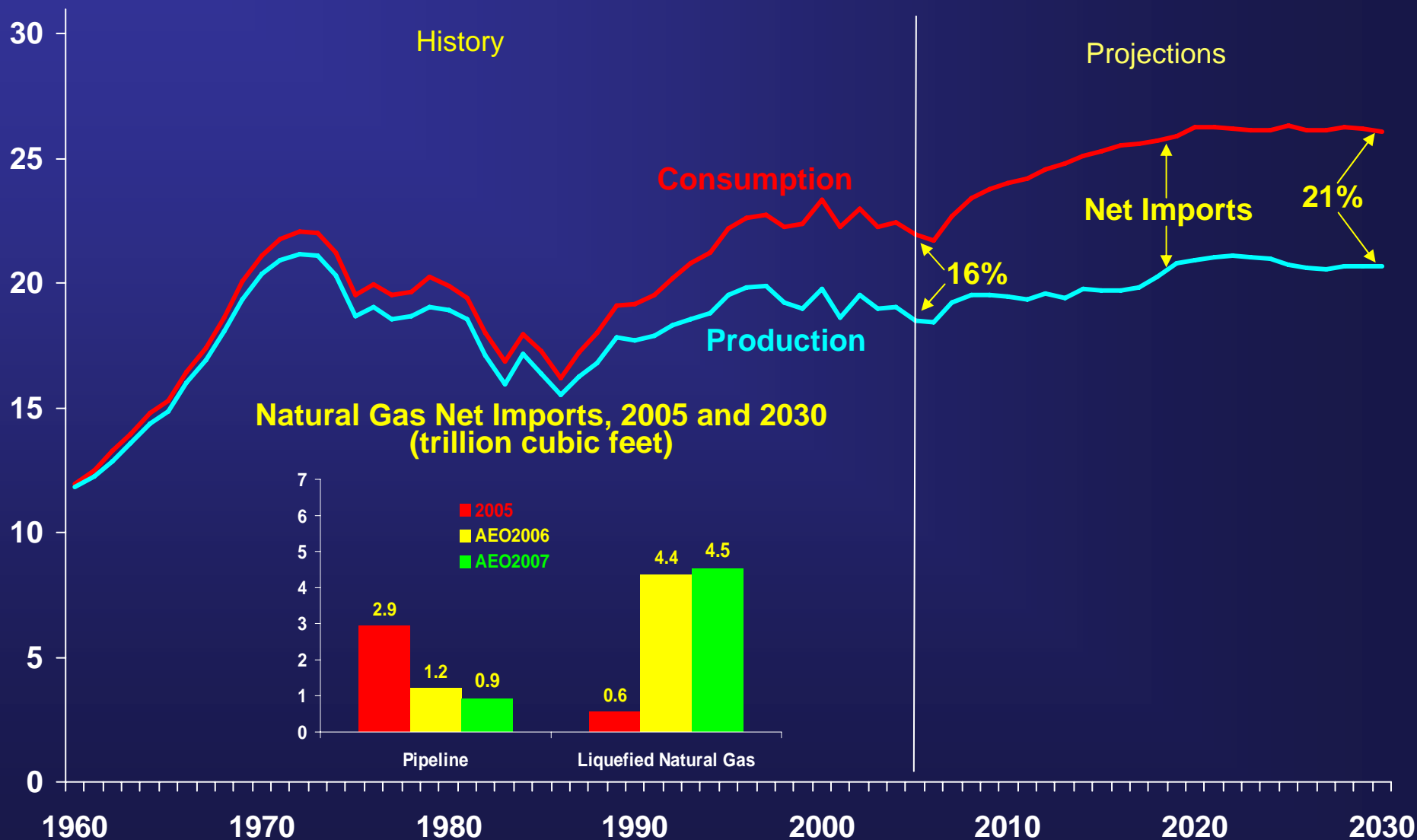
# U.S. Natural Gas Consumption by Sector, 1990-2030 (trillion cubic feet)



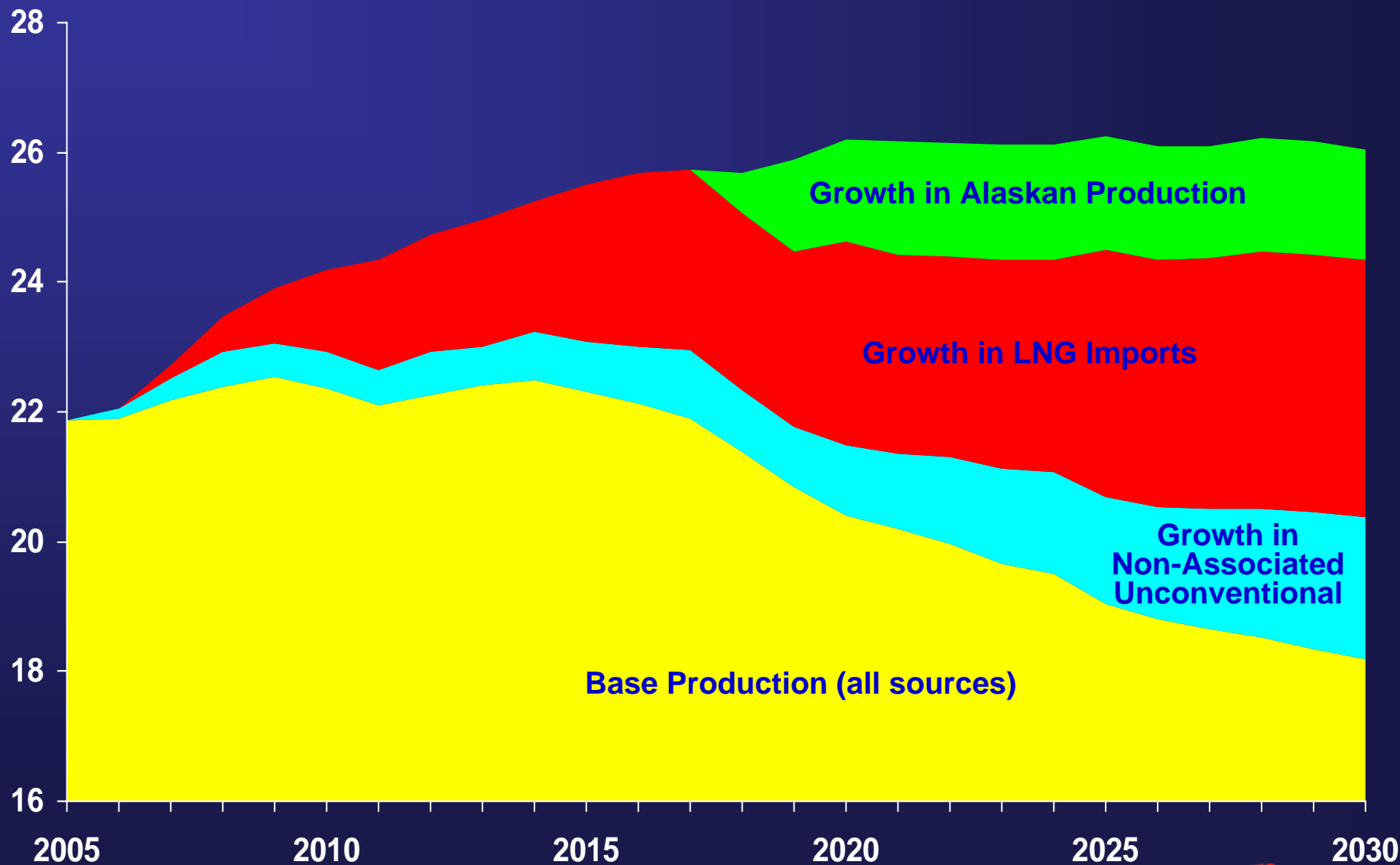
\* Includes lease and plant fuel

\*\* Includes pipeline fuel

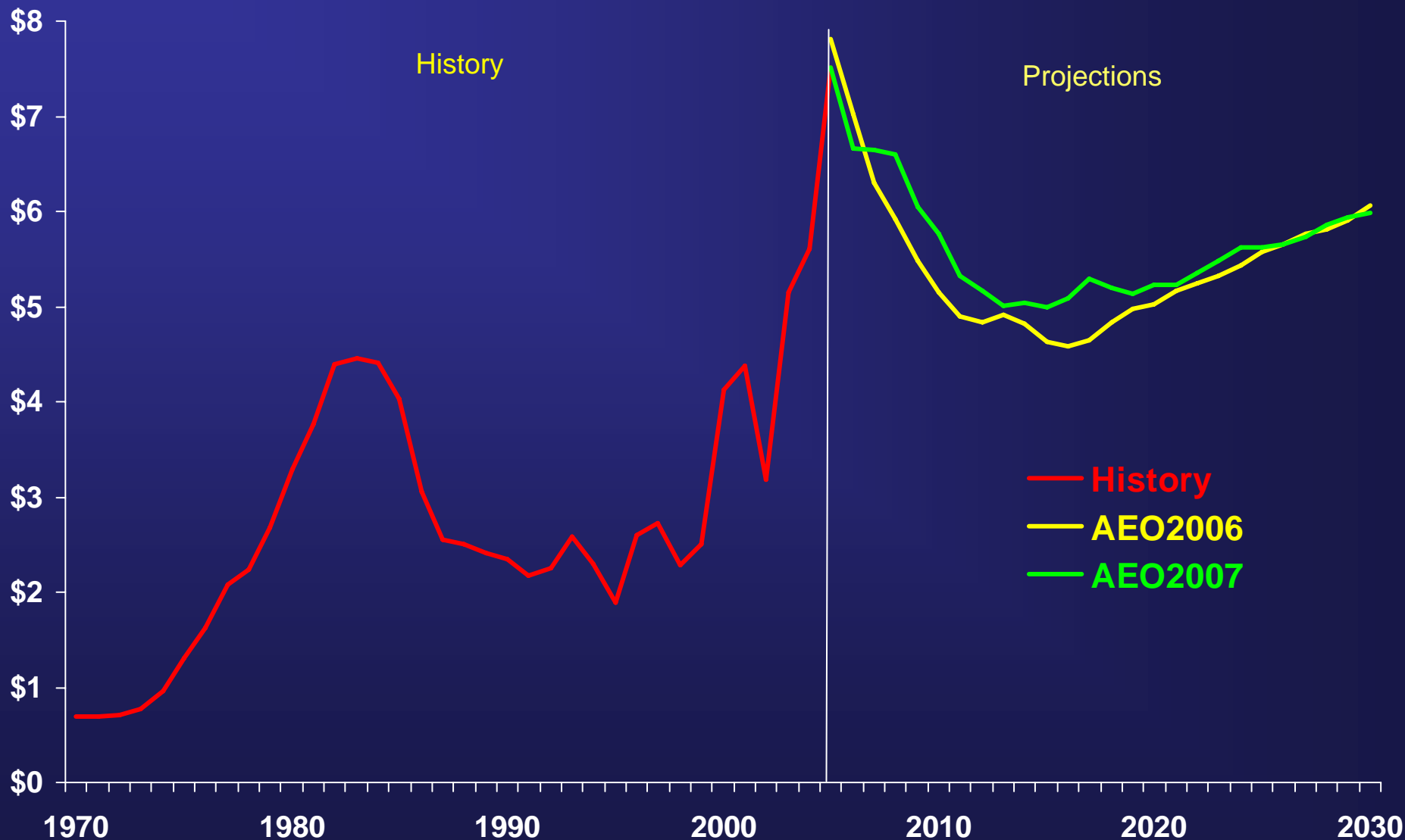
# U.S. Natural Gas Production, Consumption, and Net Imports, 1960-2030 (trillion cubic feet)



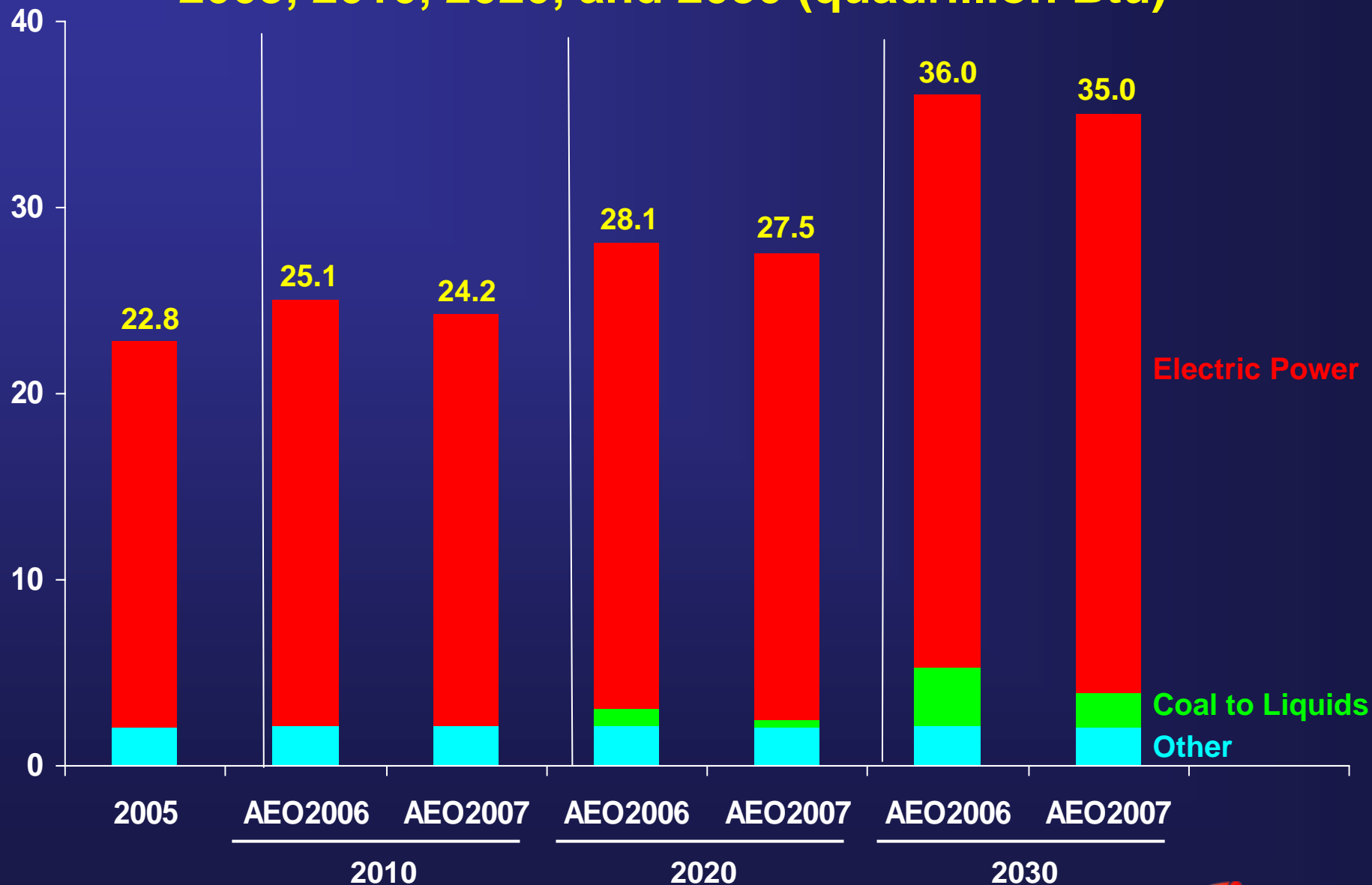
# Major Sources of Incremental U.S. Natural Gas Supply, 2006-2030 (trillion cubic feet)



# U.S. Natural Gas Wellhead Price, 1970-2030 (2005 dollars per thousand cubic feet)

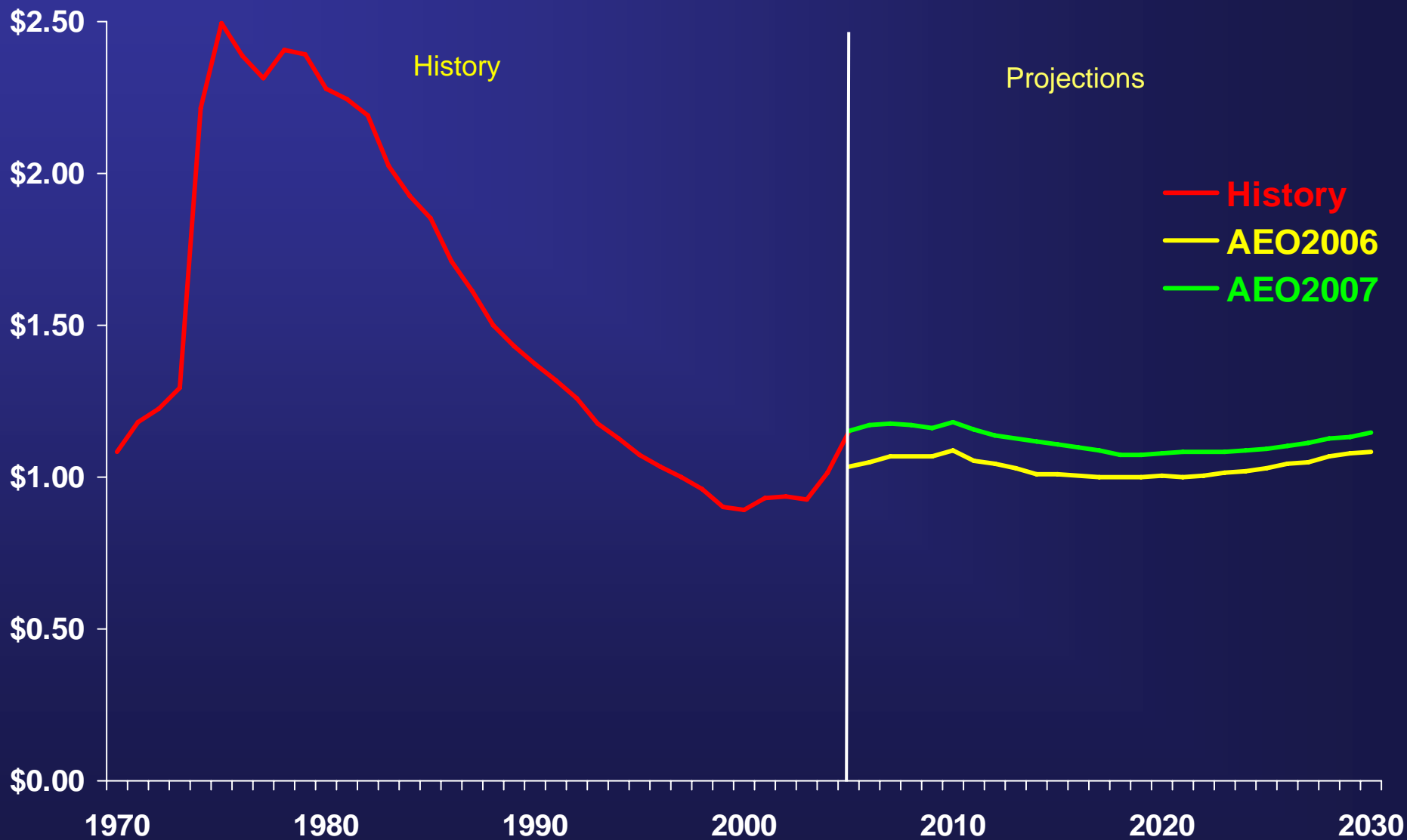


# U.S. Coal Consumption by Sector, 2005, 2010, 2020, and 2030 (quadrillion Btu)

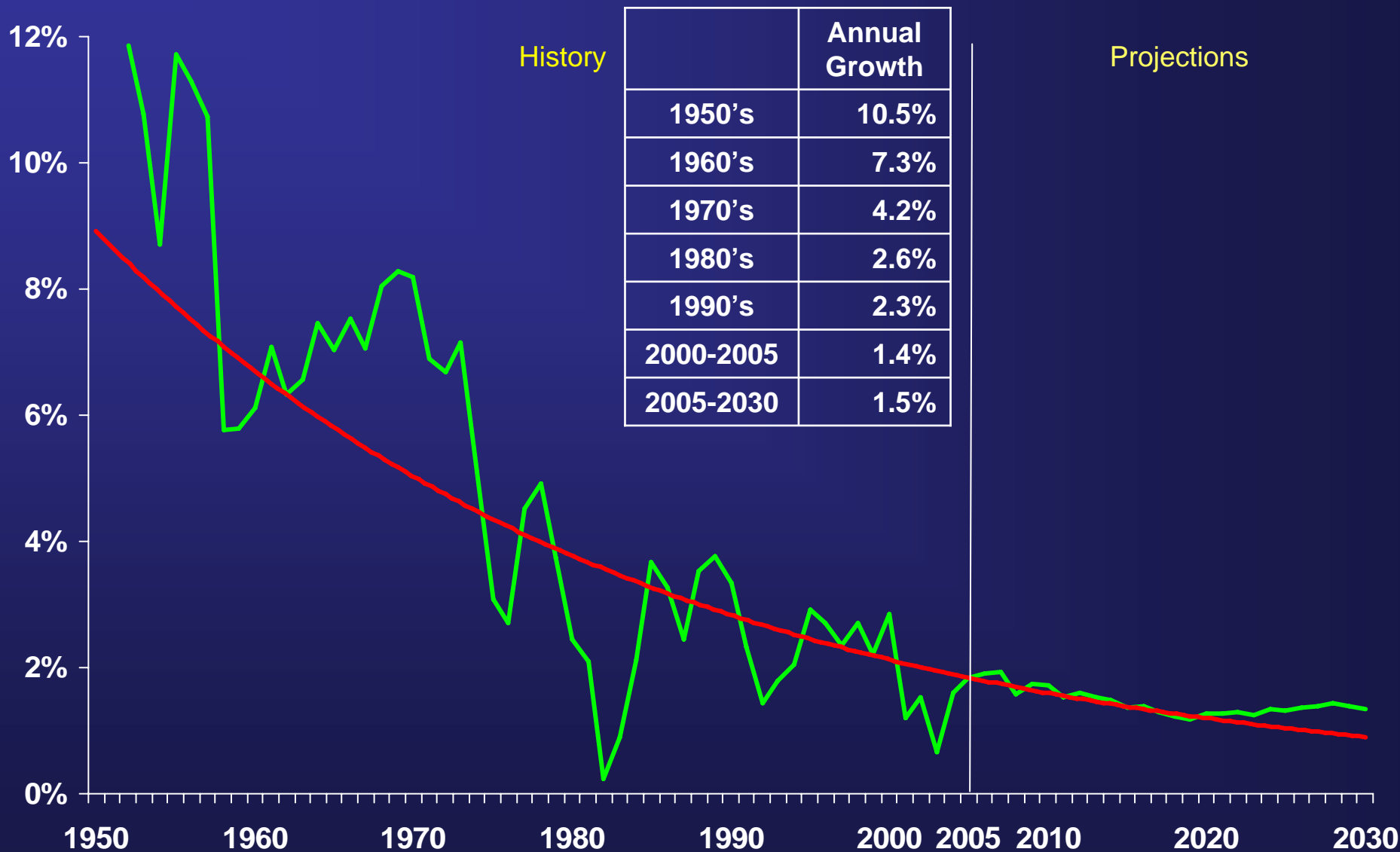




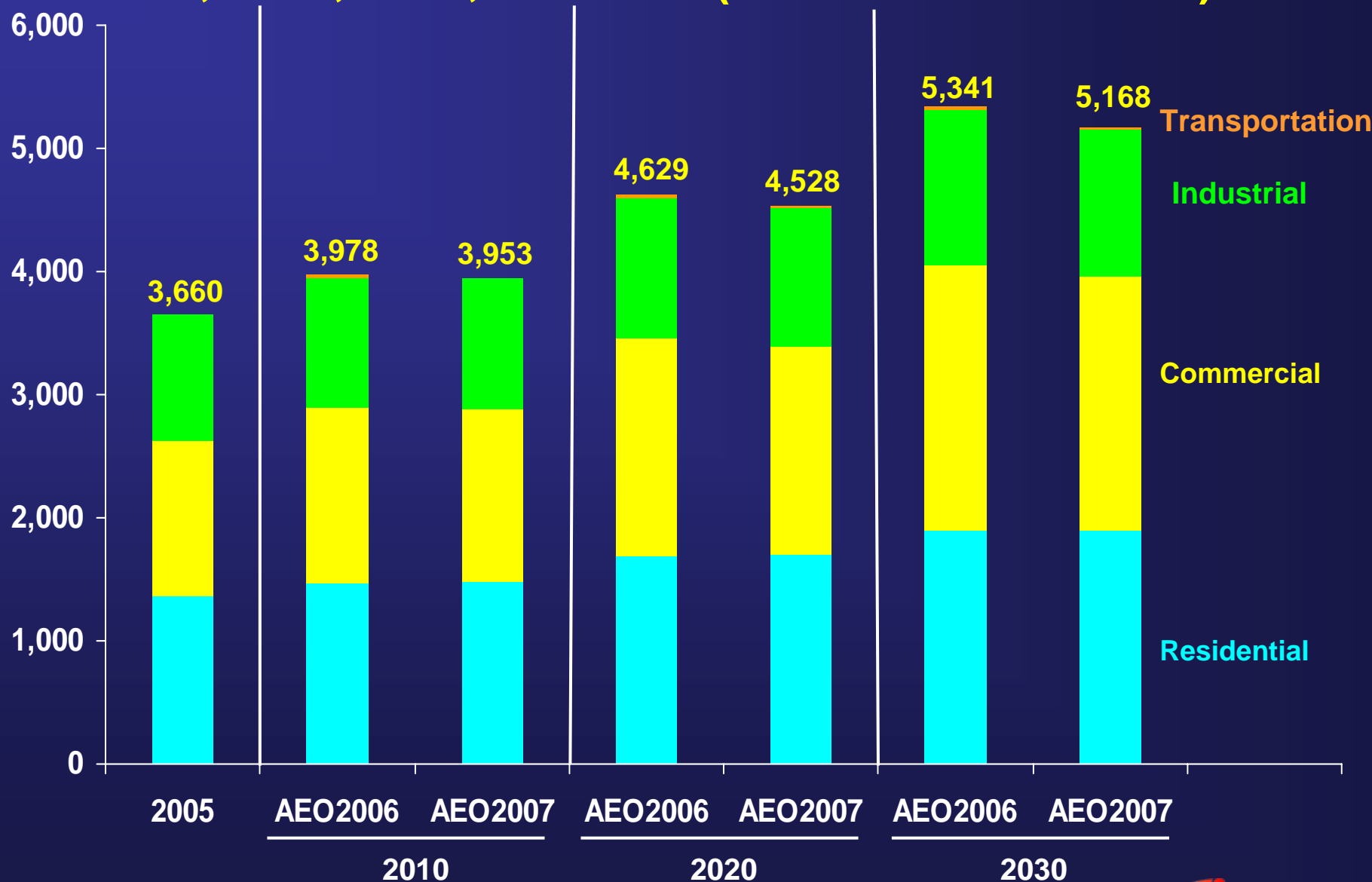
# U.S. Coal Minemouth Price, 1970-2030 (2005 dollars per million Btu)



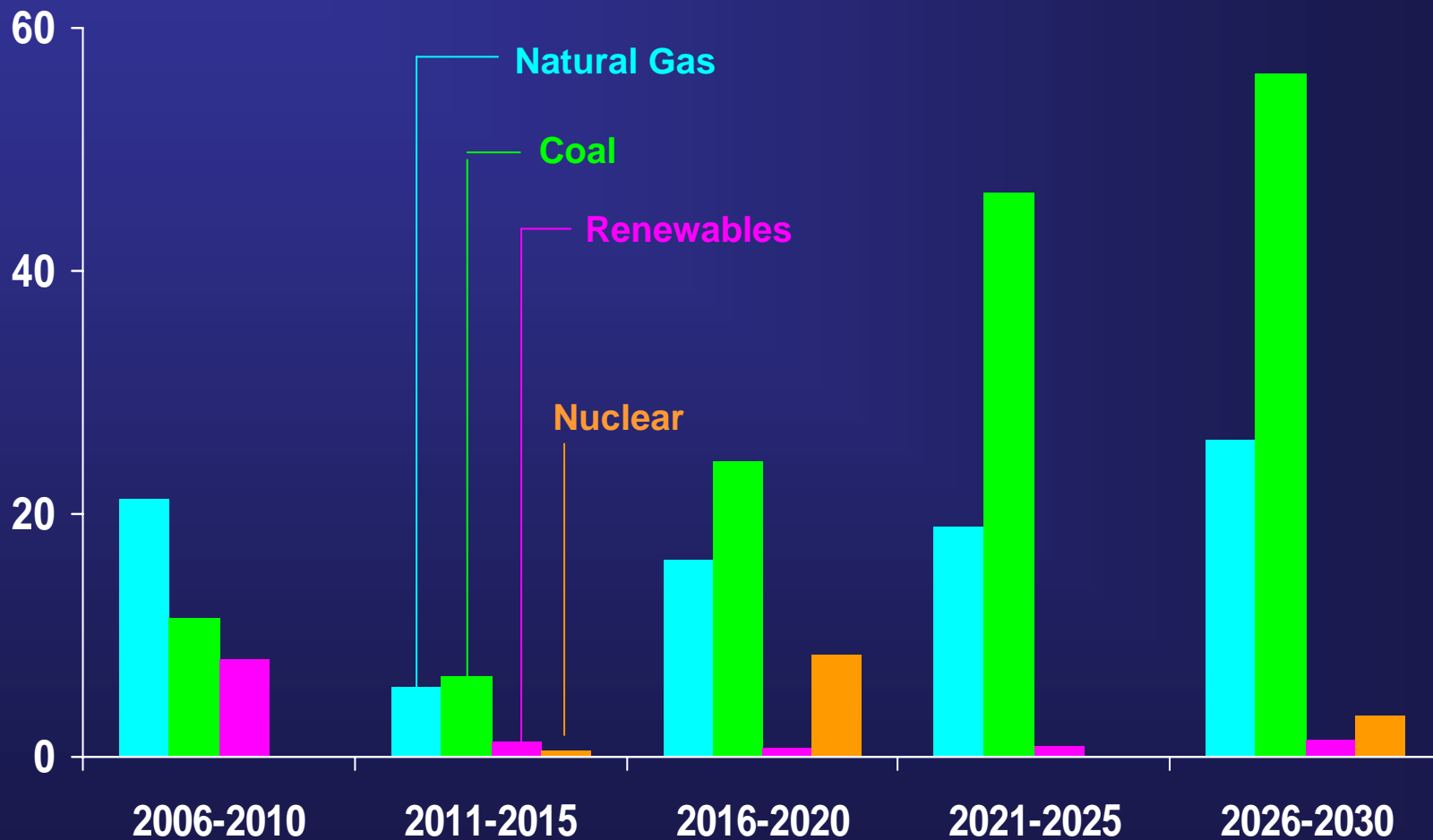
# 3-Year Rolling Average Electricity Demand Growth (with exponential trend line)



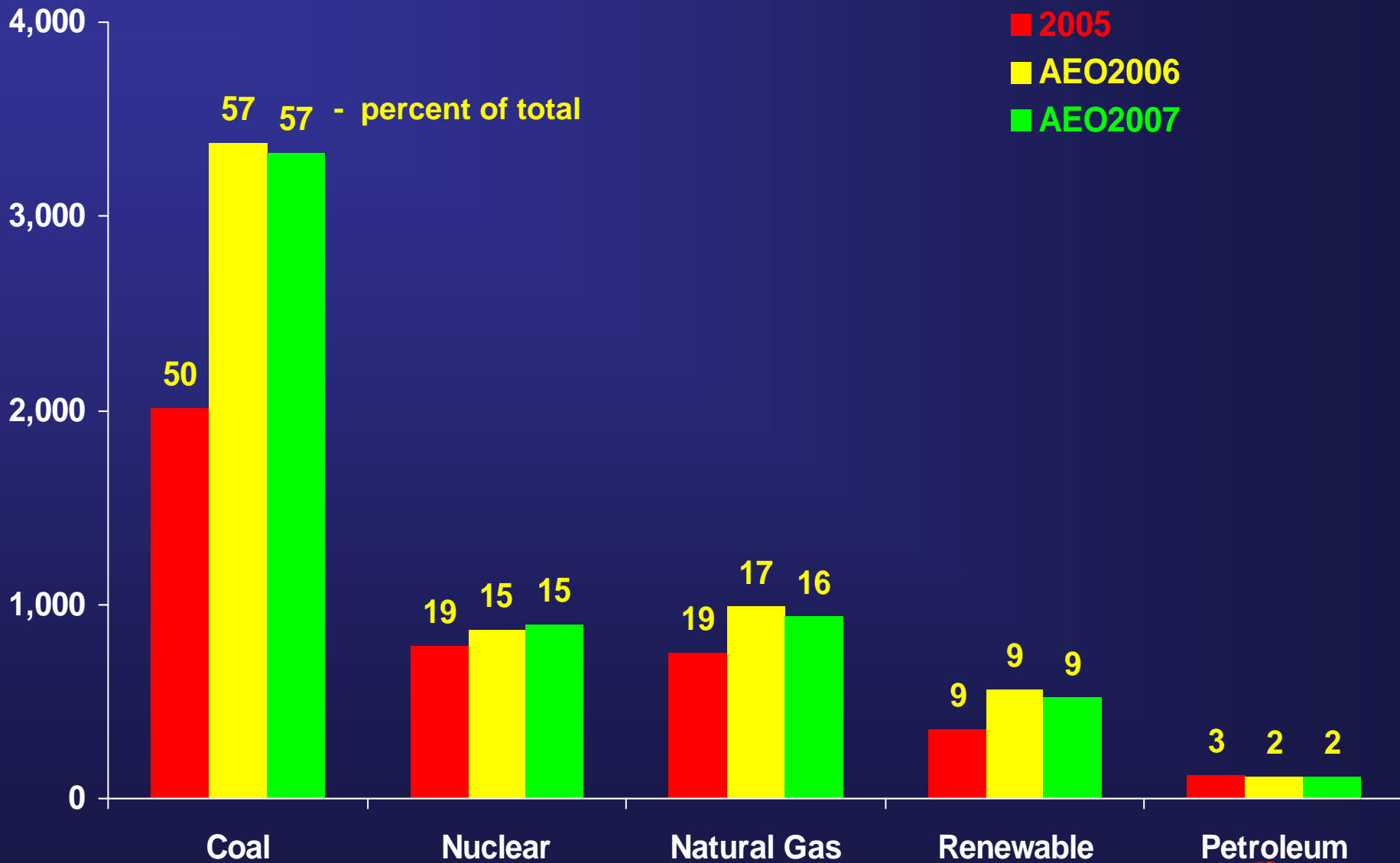
# U.S. Electricity Sales by Sector, 2005, 2010, 2020, and 2030 (billion kilowatthours)



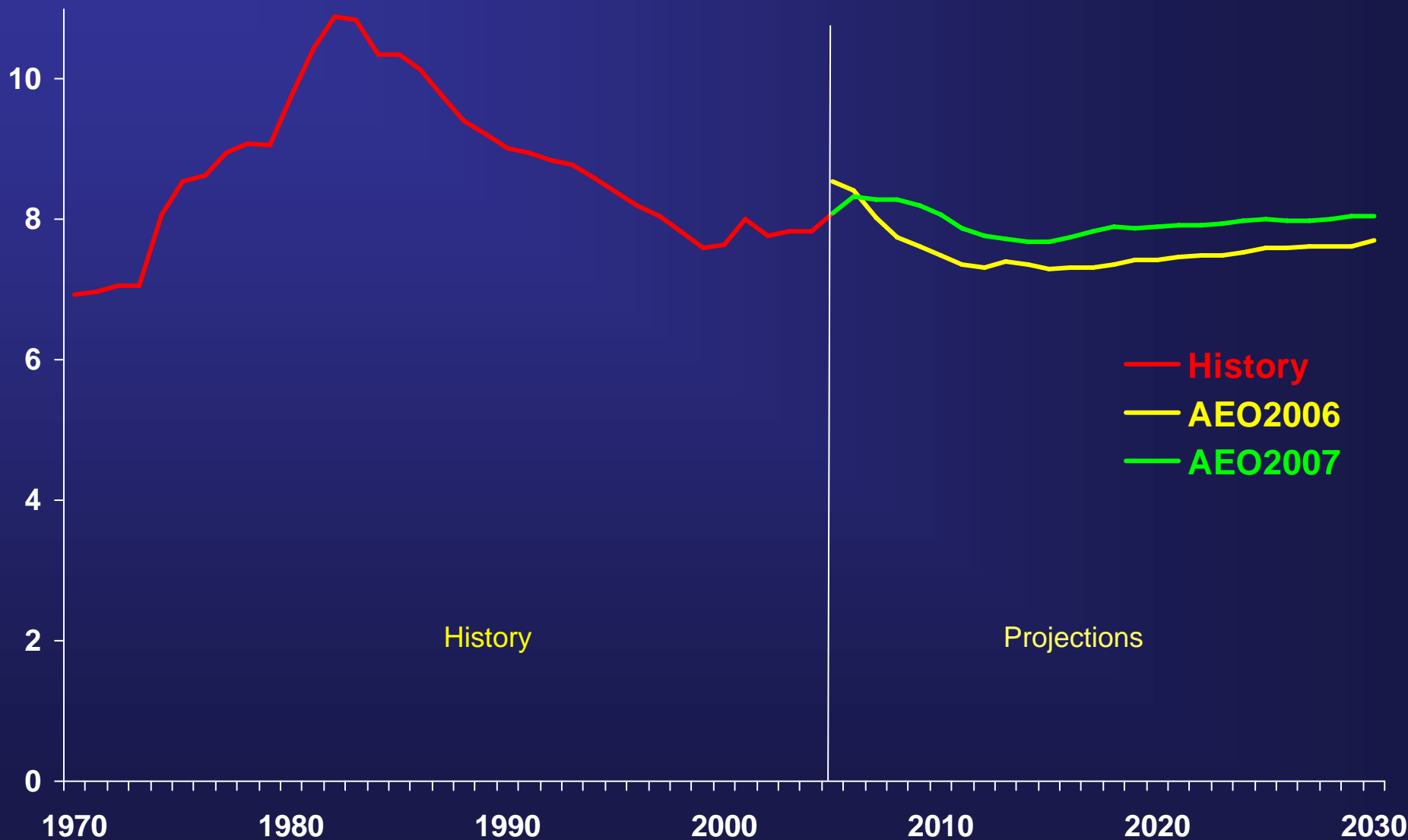
# U.S. Electricity Generation Capacity Additions by Fuel, 2006-2030 (gigawatts)



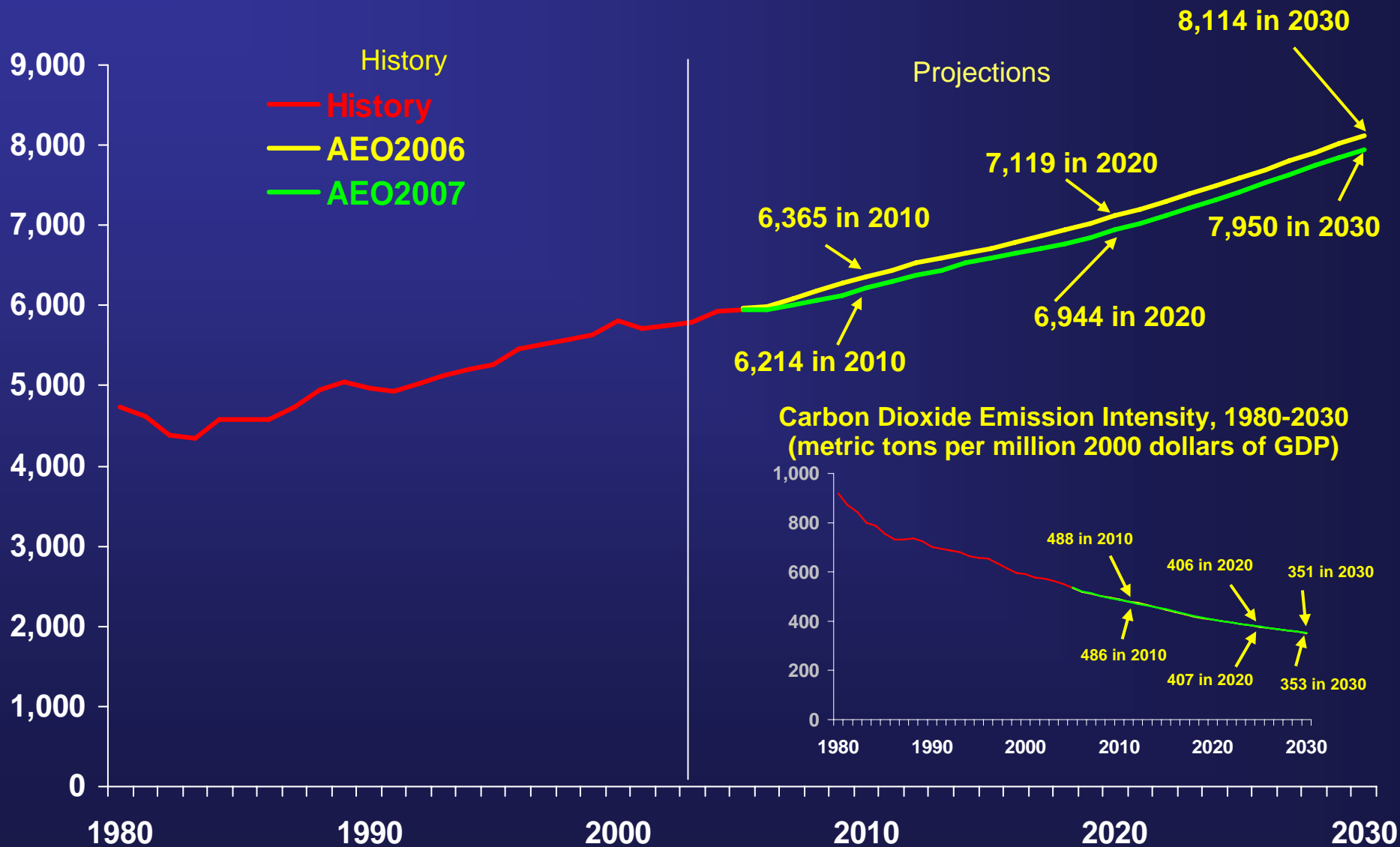
# U.S. Electricity Generation by Fuel, 2005 and 2030 (billion kilowatthours)



# U.S. Electricity Price, 1970-2030 (2005 cents per kilowatthour)



# U.S. Energy-Related Carbon Dioxide Emissions, 1980-2030 (million metric tons)



## ***Annual Energy Outlook 2007* reference case indicates that through 2030....**

- Traditional fossil fuels are expected to continue to meet the bulk of energy requirements over the projection period
- U.S. energy demand is projected to grow at an average annual rate of 1.1 percent
- The energy efficiency of the economy is projected to increase at an average annual rate of 1.8 percent
- U.S. oil import dependency is projected to grow from 60 percent to 61 percent
- U.S. natural gas use is projected to be level off over the last decade of the projection
- Future growth in U.S. natural gas supplies depends on unconventional domestic production, natural gas from Alaska, and liquefied natural gas imports
- Carbon dioxide emissions are projected to grow at an average annual rate of 1.2 percent